

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/030727 A1

(51) International Patent Classification⁷: **C07D 217/00**, A61K 31/44

(74) Common Representative: MERCK & CO., INC.?; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

(21) International Application Number:
PCT/US2004/030944

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:
22 September 2004 (22.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/505,138 23 September 2003 (23.09.2003) US

(71) Applicant (*for all designated States except US*): MERCK & CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

(72) Inventors; and
(75) Inventors/Applicants (*for US only*): ISAACS, Richard [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). DINSMORE, Christopher, J. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). MCINTYRE, Charles, J. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). PAYNE, Linda, S. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US). CLAREMON, David, A. [US/US]; 126 East Lincoln Avenue, Rahway, New Jersey 07065-0907 (US).

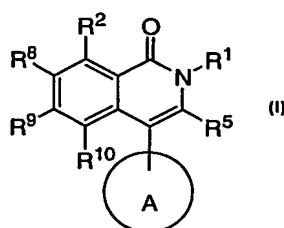
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ISOQUINOLINONE POTASSIUM CHANNEL INHIBITORS



(57) Abstract: The present invention relates to compounds having the structure formula(I) useful as potassium channel inhibitors to treat cardiac arrhythmias, and the like.

WO 2005/030727 A1